Title of Proposal - Lots 11 and 74 Beenyup Road, Banjup

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Residential Development

1.2 Provide a detailed description of the proposed action, including all proposed activities.

Lot 11 and 74 Beenyup Road, Banjup is proposed to be developed for residential housing. The site is approximately 41.4ha in size and is located approximately 23.26 km from Perth in the Swan Coastal Plain (SCP) biogeographic region of Western Australia.
Lots 11 and 74 are owned by Aigle Royal Developments and 11.06 ha of the site is proposed to be developed for residential housing. The site will require an amendment to the MRS to re-zone parts of the site for urban residential development.
The western portion of the site zoned ‘Urban Deferred’ is proposed to be rezoned to ‘Urban’ and a portion of the ‘Rural – Water Protection’ zone is proposed to be rezoned to ‘Urban’ under the Metropolitan Region Scheme.
If the proposed scheme amendment is approved, a development application (DA) submission will be required to begin site works. A Native Vegetation Clearing Permit (NVCP) will be required for approval to clear the site containing Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC).

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Lots 11 and 74 Beenyup Road, Banjup	1	-32.157430606221	115.86865472413
Lots 11 and 74 Beenyup Road, Banjup	2	-32.157367025808	115.87459849931
Lots 11 and 74 Beenyup Road, Banjup	3	-32.158729453516	115.87582158662
Lots 11 and 74 Beenyup Road, Banjup	4	-32.16032800939	115.87684082604
Lots 11 and 74 Beenyup Road, Banjup	5	-32.160337092014	115.87615418054
Lots 11 and 74 Beenyup Road, Banjup	6	-32.160609570305	115.87616490937

Area	Point	Latitude	Longitude
Lots 11 and 74 Beenyup Road, Banjup	7	-32.160854800069	115.87621855355
Lots 11 and 74 Beenyup Road, Banjup	8	-32.161054616427	115.87628292657
Lots 11 and 74 Beenyup Road, Banjup	9	-32.161308927521	115.87608980752
Lots 11 and 74 Beenyup Road, Banjup	10	-32.161399752739	115.87601470567
Lots 11 and 74 Beenyup Road, Banjup	11	-32.161890207356	115.87604689218
Lots 11 and 74 Beenyup Road, Banjup	12	-32.162035526735	115.87607907868
Lots 11 and 74 Beenyup Road, Banjup	13	-32.162317082373	115.8756391964
Lots 11 and 74 Beenyup Road, Banjup	14	-32.162353412069	115.87524222947
Lots 11 and 74 Beenyup Road, Banjup	15	-32.162734873007	115.8751027546
Lots 11 and 74 Beenyup Road, Banjup	16	-32.162798449674	115.86866545297
Lots 11 and 74 Beenyup Road, Banjup	17	-32.157430606221	115.86865472413
Lots 11 and 74 Beenyup Road, Banjup	18	-32.157430606221	115.86865472413

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

Lots 11 and 74 Beenyup Road, Banjup (‘the site’) is located in the City of Cockburn, approximately 24 km south of Perth.

The western portion of the site contains a residential dwelling and the eastern portion of the site contains a plant nursery. The remainder of the site is unused.

The western portion of the site is zoned as ‘Urban Deferred’ under the MRS and ‘Development’ under City of Cockburn Town Planning Scheme 3 (TPS). The remainder of the site is zoned as ‘Rural - Water Protection’ under the MRS and ‘Resource’ under the TPS. The purpose of the ‘Rural - Water Protection’ zone is to ensure there is no contamination of the water source and only low risk land development is compatible in this zone (WAPC 2015).

A Bush Forever site (Jandakot Regional Park) exists directly to the west and south of Lot 74. Jandakot Regional Park also exists to the north-east of the site. Residential development occurs

directly west of Lot 11 and to the north of the site. Rural lots exist to the east and south-east of the site.

1.6 What is the size of the development footprint or work area?

11.06

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. Lot 11 and 74 Beenyup Road, Banjup

1.8 Primary Jurisdiction.

Western Australia

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 09/2018

End date 11/2022

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

The site will require an amendment to the MRS to re-zone parts of the site for urban residential development.

The western portion of the site zoned ‘Urban Deferred’ is proposed to be rezoned to ‘Urban’ and a portion of the ‘Rural – Water Protection’ zone is proposed to be rezoned to ‘Urban’ under the MRS.

If the proposed scheme amendment is approved, a development application (DA) submission will be required to begin site works. A Native Vegetation Clearing Permit (NVCP) will be required for approval to clear the site containing Banksia Woodlands TEC.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Preliminary consultation has been undertaken with the City of Cockburn and the Office of the Environmental Protection Authority. Future consultation will be undertaken when the planning process to lift the 'Urban Deferred' zoning and rezone the remaining proposed development area to 'Urban' has commenced.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

Past planning approvals, such as rezoning of the site, has not been subject to environmental impact assessment under Commonwealth or State legislation. However, the current proposed MRS Amendment will be subject to Part IV of the State Environmental Protection Act 1986, and will require referral to the Western Australian Environmental Protection Authority for its consideration.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to impact on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Carnaby's Black Cockatoo (Calyptorhynchus	A Black Cockatoo habitat assessment was

Species	Impact
latirostris) Forest Red-tailed Black Cockatoo (Calyporhynchus banksii naso) Baudin's Black Cockatoo (Calyptorhynchus baudinii)	undertaken on 9 February 2017 to determine the type and extent of habitat suitable for Black Cockatoos within the survey area. No Black Cockatoos were observed flying or heard within the survey area (360 Environmental 2017). The survey considered Carnaby's Black Cockatoo (Calyptorhynchus latirostris), Forest Red-tailed Black Cockatoo (FRTBC [Calyptorhynchus banskii naso]) and Baudin's Black Cockatoo (Calyptorhynchus baudinii) listed under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). Under the DotEE Referral Guidelines for Three Threatened Black Cockatoo Species (DSEWPaC 2012), it is recommended a proposal be referred to the DotEE for assessment whereby more than 1 ha of vegetation known to contain breeding or foraging habitat is to be cleared. Foraging Habitat Carnaby's Black Cockatoos feed on a variety of seeds, nuts and flowers from a range of native and exotic plants. Food plants include a number of Banksia species, Pine trees, Marri, Jarrah and Allocasuarina (Shah 2006; Johnstone & Storr 1998). The Black Cockatoo assessment identified 14.13 ha of foraging habitat (Figure 6). This foraging habitat consisted of Jarrah, Flooded Gum, Banksia attenuata, B. menziesii, B. ilicifolia, Allocasuarina fraseriana and Xanthorrhoea preissii. These species are known dietary items of all three Black Cockatoo species (Johnstone & Kirkby 2011). Two species recorded in the survey area; Jarrah and Flooded Gum are known dietary items of the Black Cockatoos and are considered foraging habitat. The foraging habitat includes trees that are also potential breeding trees with a Diameter at Breast Height (DBH) of >500mm (360 Environmental 2017). Breeding Habitat Black Cockatoos breed in large hollow-bearing trees, generally within woodlands or forests (Johnstone et al. 2013). The size of the tree can be a useful indication of the hollow-bearing potential of the tree. Trees of suitable DBH are potentially important for maintaining breeding in

Species	Impact
	the long-term, through maintaining the integrity of the habitat and allowing trees to provide future nest hollows. Maintaining the long-term supply of trees of a size to provide suitable nest hollows is particularly important in woodland stands that are known to support Black Cockatoo breeding (DSEWPaC 2012). The Black Cockatoo habitat assessment identified 11 Jarrah and eight Flooded Gum (E. rudis) trees considered to be potential breeding habitats for Black Cockatoos with a DBH >500 mm under the EPBC Act Black Cockatoo referral guidelines (Figure 6). No hollows observed were considered to be large enough at the entrances or deep enough to be considered as potential breeding hollows (360 Environmental 2017). There are 19 potential Black Cockatoo breeding trees with no observable breeding hollows recorded within the proposed development area, this suggests that the site is not utilised for breeding by the Black Cockatoo. Suitable foraging habitat of the Black Cockatoo has an area of 14.13 ha within the project area and coincides with Banksia Woodlands TEC. The proposed development would require clearing of 9.07 ha of Black Cockatoo habitat within the proposed 'Urban' development area while 5.06 ha will remain within the balance of title.
Banksia Woodlands of the Swan Coastal Plain - Threatened ecological community	'Banksia Woodlands of the Swan Coastal Plain' is listed (16 September 2016) as an Endangered community under the EPBC Act. A Level 2 Flora and Vegetation survey was undertaken and a subsequent desktop assessment determined that the TEC is considered to occur in the site. The statistical analysis identified vegetation associations; BaBm(a), AfEmBi, BiKg, BaBm(b) as having the most affiliation to SCP23a, FCT 21a, FCT 21c – Banksia attenuata, Banksia attenuata – Eucalyptus marginata woodlands or low lying Banksia attenuata woodlands or shrublands, respectively (360 Environmental 2017) (EPBC 2016). These FCTs are listed as sub-communities of the Banksia Woodland TEC (DotEE 2016). The FCT has to meet key

Species	Impact
	diagnostic characteristics be considered a TEC. In regards to the presence of the Banksia Woodland TEC, the Approved Conservation Advice for the thresholds state that (DotEE 2016): Vegetation in Excellent condition should have a minimum patch size of 0.5 ha; Vegetation in Very Good condition should be a minimum of 1 ha; and Vegetation in Good condition should be a minimum of 2 ha. Vegetation patches considered Degraded or worse are excluded and not protected under the EPBC Act. Based on this information and the survey results, the vegetation in Good – Degraded condition has been excluded. Vegetation mapped as Good, Good – Very Good, Excellent – Very Good and Excellent are considered to represent the Banksia Woodlands TEC in the survey area and equates to 9.93 ha. Banksia Woodlands of the Swan Coastal Plain is listed as Endangered and protected under the EPBC Act (s 266B). Of this TEC 8.53 ha occurs across the proposed development area. The proposed development would require clearing 8.53 ha of the Banksia Woodlands TEC while conserving 1.4 ha. TECs and their associated buffers are regarded as ESAs.

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action likely to impact on any part of the environment in the

Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Will there be any impact on a water resource related to coal / gas / mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to impact on any part of the environment in the Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

Portions of the site have been completely cleared for residential and nursery purposes, some areas have been allowed to regenerate naturally and others have had endemic and non-endemic species plants. A large proportion of the site contains intact native vegetation (360 Environmental 2016).

A Level 2 Flora and Vegetation survey was conducted on 15th and 16th September 2015. A total of 145 taxa from 101 genera and 45 families were recorded during the survey. Of the 145 taxa, 27 are introduced species (360 Environmental 2016).

The likelihood of occurrence of flora species has been determined by comparing the plant species requirements to the vegetation descriptions obtained from a Level 2 Flora and Vegetation Survey of the site (360 Environmental 2016). The likelihood assessment determined that of the nine Conservation significant species flora (listed under the EPBC Act) as potentially occurring in the vicinity of the survey area. Of this, there are four considered likely or possible to occur on site (Table 3), which are *Caladenia huegelii, Diuris purdiei, Drakaea elastica* and *Drakaea micrantha*. These are perennial (tuberous) short-lived herbs (orchids) that need various conditions to flower and exhibit different flowering patterns. Regardless of these attributes, the survey was undertaken during the optimum time for the flowering of these species and targeted searches were undertaken in their preferred habitats and none were found during the survey (360 Environmental 2016).

A DPaW NatureMap Fauna Search was undertaken with a 2 km and 5 km buffer of the site and a DotE PMST was undertaken with a 1 km buffer of the site (Appendix B) (DPaW 2015b; DotE 2015a). The NatureMap Report identified two Threatened fauna species, one Priority 4 fauna species, one Priority 5 fauna species and one fauna species protected under international agreement as occurring within 2 km of the site. The PMST identified eight Threatened fauna species and five Migratory species as occurring within a 1km buffer of the site.

The DPaW database search results are based on recorded occurrences of individuals and therefore are considered more site specific and more accurate than the PMST that often returns modelled distributions of species.

The likelihood of each of the fauna species occurring within the site is shown in Table 6 below. The likelihood assessment found that the site is likely to offer suitable habitat for the:

- Forest Red-tailed Black Cockatoo

- Carnaby's Cockatoo

It is considered that the site may offer suitable habitat for the:

- Great Egret

- Chuditch

The Great Egret are likely to be associated the CCW which contains very good to excellent quality vegetation. The Chuditch was not found within 2 km NatureMap Search, however, suitable habitat of Eucalypt Woodland is present on site.

3.2 Describe the hydrology relevant to the project area (including water flows).

The Ramsar Convention on Wetlands (1971) is an intergovernmental treaty dedicated to the conservation and use of wetlands listed under the List of Wetlands of International Importance (Ramsar sites). These sites require management to ensure their ecological values are maintained or improved (CCWA 2005).

Two Ramsar wetlands exist within 5 km radius of the site, Thomsons Lake and Forrestdale Lake. Thomsons Lake wetland is located approximately 2.5 km west of the site. Forrestdale Lake is located approximately 5.0 km east of the site (Ramsar 1971).

The DPaW Geomorphic Wetlands Dataset identified that a Conservation Category Wetland (CCW) exists in the central and eastern portion of the site and a Resource Enhancement Wetland (REW) exists in the south-eastern portion of the site, adjoining the CCW (DPaW 2015). The site is not listed as a Ramsar site. The site is listed under the Directory of Important Wetlands which covers the wider area and includes urban areas.

CCWs and their associated buffers are considered ESAs and as such exemptions offered for clearing under Regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 do not apply.

Groundwater levels range from 25.20 m AHD in the south central portion of the site to 25.85 m AHD in the north-western portion of the site and 25.40 m AHD in the north-eastern portion of the site.

The site is located in the Jandakot Underground Water Pollution Control Area (UWPCA) and is therefore subject to the provisions of the Statement of Planning Policy No. 2.3- Jandakot Groundwater Protection Policy and DoW Water Quality Protection Note no. 25. The western portion of the site is classified as Priority 3 and the remainder of the site is within the periphery of a Priority 2 area under the Jandakot UWPCA. The classifications are defined below (DoW

2016);

Priority 1 (P1) areas are defined and managed to ensure there is no degradation of the quality of the drinking water source with the objective of risk avoidance. P1 areas occur within the PDWSAs where existing land uses have low risks to PDWSAs. Changed of land use that introduce additional risks are not recommended. P1 areas would typically include Crown land, but may also include private land;

Priority 2 (P2) areas are defined and managed to maintain or improve the quality of the drinking water source with the objective of risk minimisation. P2 areas occur within PDWSAs where the land is zoned rural and the risks need to be minimised; and

Priority 3 (P3) areas are defined and managed to maintain the quality of the drinking water source for as long as possible with the objective of risk management. P3 areas occur within PDWSAs where the land is zoned for urban and commercial or light industrial uses.

There are no wellhead protection zones or reservoir protection zones exist within the vicinity of the site and therefore do not require a buffer from urban development (WAPC 2017).

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The Department of Agriculture and Food, Western Australia (DAFWA) Soil Subsystems mapping indicates that the site falls within two soil subsystems (DAFWA 2012). These subsystems are described below:

Bassendean B1 Phase – Deep bleached grey sands sometimes with pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 m;

Bassendean B2 Phase – Deep bleached grey sands with a pale yellow B horizon or a weak iron-organic hardpan 1-2 m;

Bassendean B3 Phase – Moderately deep, bleached sands with an iron-organic pan, or clay subsoil. Surfaces are dark grey sand or sandy loam;

Bassendean B4 Phase – Deep grey siliceous sands or bleached sands, underlain at depths generally greater than 1.5 m by clay or less frequently a strong iron-organic hardpan; and

Bassendean wet, swamp Phase – Wet soils (Pale deep sands and peaty sands).

Acid Sulfate Soil (ASS) risk mapping by the Department of Environment Regulation (DER) has identified the central portion of the site (around wetlands) as having ‘High’ to ‘Moderate’ risk of ASS occurring within 3 m of natural soil surface. The west and eastern parts of the site are classified as having ‘Moderate’ to ‘Low’ risk of ASS occurring within 3 m of the natural soil surface (DER 2014a).

A search of the DER Contaminated Sites Database did not identify any contaminated sites present within the site (DER 2016). However, the DER contaminated sites database only shows three of seven classifications that may be placed on a site. A cluster of listed contaminated sites exists approximately 725m west of the site. These contaminated sites are 'remediated for restricted use' based on the groundwater containing microbiological indicators of possible pathogens (DER 2016).

According to the DER 'Contaminated sites guidelines: Assessment and management of contaminated sites' and due to the chemicals typically used in nursery operations, the plant nursery located within the eastern portion of the site is a potential contaminating land use (DER 2014b).

Mapping of the vegetation of the Perth region of Western Australia was completed on a broad scale by Beard (1981). These vegetation units were re-assessed by Shepherd et al. (2001) to account for clearing in the intensive land use zone, dividing some large vegetation units into smaller units.

There is one Beard / Shepherd vegetation unit in the site. The Shepherd et al. (2001) vegetation type is described below, and its representation within the site, subregion, region and state:

1001 (9e2Mb cbLi) – Bassendean; Medium very sparse woodland; *E. marginata* with low woodland, *Banksia sp*. and *Casuarina sp.*

Mapping by Heddle et al. (1980) is based on the relationship to the landform-soil units determined by Churchward and McArthur (1980). This mapping identified one vegetation complex occurring in the site which is described below and summarised in Table 6.

'Bassendean Complex - Central and South' that covers majority of the study area: vegetation ranging from woodland of *Eucalyptus marginata* - *Allocasuarina fraseriana* - Banksia spp. to low woodland of Melaleuca spp. and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* to *Eucalyptus todtiana* in the vicinity of Perth.

Within constrained areas on the Swan Coastal Plain, the Environmental Protection Authority (EPA) Guidance Statement 33: Environmental Guidance for Planning and Development has set a threshold for retention of 10% of the pre-existing extent of native vegetation (EPA 2008). The site is considered to be a constrained area as it is with the Perth MRS and adjoins urban areas, which means there is a reasonable expectation that development will be able to proceed. All the current vegetation extents are greater than the above-mentioned 10% threshold.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

The site is classified as an Environmentally Sensitive Area (ESA) as it is listed under the Directory of Important Wetlands and contains a CCW. Bush Forever Site No. 492 (which forms part of the Jandakot Regional Park), adjoins the western and southern part of Lot 74. Bush Forever Site No. 263 (which is also part of the Jandakot Regional Park) exists approximately

650 m to the north and 1.17 km to the east of the site. There are extensive areas of Bush Forever surrounding the site. These sites are associated with Forrestdale Lake Nature Reserve and Beeliar Regional Park (including Thompsons Lake Nature Reserve).

Biodiversity maintenance of a fragmented landscape is dependent upon the distribution of remaining natural areas. Ecological function can be maintained through a series of linkages that are important in assisting with facilitating movement of fauna, seeds, pollen and providing fire and climate change resilience (DEC 2010).

The EPA defines ecological linkages as a network of native vegetation that maintains some ecological functions of natural areas and counters the effect of habitat fragmentation (PBP 2013).

One Perth Regional Ecological Linkage (52) runs through the northern half of the site (PBP 2008).

3.5 Describe the status of native vegetation relevant to the project area.

Vegetation condition within the site ranged from ‘Completely Degraded’ to ‘Excellent’ (360 Environmental 2016). Historical vegetation clearing, weeds, housing, a nursery and the presence of tracks in the site were the most frequently observed impacts on native vegetation (360 Environmental 2016).

As evident from historical photographs, clearing of the eastern side of the site was undertaken in the early 1980’s. This has had a direct effect on vegetation association ‘Ha’ and ‘P’ which have regrown and now has very low diversity. Vegetation ‘P’ has had supplementary planting undertaken and is now interspersed with non-endemic species along with naturally occurring vegetation (360 Environmental 2016).

The CCW in the middle of the site has remained relatively intact and the majority was considered to be in ‘Very Good’ to ‘Excellent condition’ with a couple of areas of vegetation in ‘Good’ condition along with the tracks and a couple of small pockets considered to be in ‘Degraded’ to ‘Completely Degraded’ condition. The extent of each vegetation condition category is presented below (360 Environmental 2016):

Excellent: 1.29 ha

Excellent - Very Good: 11.71 ha

Very Good: 9.52 ha

Very Good - Good: 1.25 ha

Good: 9.70 ha

Good-Degraded: 1.29 ha

Degraded: 0.28 ha

Completely Degraded: 3.36 ha

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The topography of the site sits at an elevation of between 25 m Australian Height Datum (AHD) in the southern central portion of the site to 27 m AHD in the eastern and north-western portion of the site to 34 m AHD in the mid-western portion of the site.

3.7 Describe the current condition of the environment relevant to the project area.

Vegetation condition ranged from Completely Degraded to Excellent. Historical vegetation clearing, weeds, housing, a nursery and the presence of tracks within the site were the most frequently observed impacts on native vegetation (360 Environmental 2016).

Historical aerial photography indicates evidence of clearing of the eastern side of the site was undertaken around 1983 for residential and agricultural purposes. This has direct effect on vegetation associations which have regrown and have very low diversity. Additional tracks and clearing has been undertaken since 1983, including another residence on the western side of the lot. The CCW within the middle of the site has remained relatively intact and the majority is in ‘Very Good’ to ‘Excellent’ condition with small portions in ‘Good’ condition along with the tracks considered to be in ‘Degraded’ to ‘Completely Degraded’ condition (360 Environmental 2016).

A total of 27 introduced species were recorded during the survey. Two species, **Asparagus asparagoides* and **Zantedeschia aethiopica*, are listed as Declared under the Biosecurity and Agriculture Management Act 2007 (BAM Act). One species, **Asparagus asparagoides* is listed as a Weed of National Significance (WONS) (360 Environmental 2016).

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

A search of the Heritage Council of Western Australia database indicated that no culturally significant sites exist within or nearby the Project area. The closest State Heritage site is in excess of 9 km from the Project area (SHO 2017), the proposed development is not likely to impact on any World Heritage or National Heritage places.

3.9 Describe any Indigenous heritage values relevant to the project area.

A search of the Department of Aboriginal Affairs' (DAA) Aboriginal Heritage Inquiry System did not identify any 'Registered Aboriginal Site' or 'Other Heritage Places' within the site (DAA 2017). The DAA search showed registered sites within the vicinity of the project area

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

Freehold title of Aigle Royal Developments.

3.11 Describe any existing or any proposed uses relevant to the project area.

A review of historical aerial photography has been undertaken to determine historical land uses and disturbances within the site. Historical aerials for 1974 to present are displayed Figures 11a-g in Attachment 1: *EPBC Figures* of this application.

The eastern third of the site was historically cleared in the early 1980's or a native plant nursery. The clearing took place over most of the Resource Enhancement Wetland (REW) within Lot 74. The eastern portion of Lot 11 remains disturbed due to the presence of the nursery, with the plantations extending to as much as 50 m from the CCW. Clearing along the western portion of the site took place in the early 1990's which included wide tracks and a residence being built. In the early 2000's, extensive disturbance occurred within the western portion of the land through clearing for tracks.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

The proposed development and subsequent MRS amendment to re-zone the land has been designed to facilitate future urban development as well as avoid direct impacts on the Conservation Category Wetland (CCW) as well as some areas of native upland vegetation within the southern portion of the site. The following management measures will be implemented to avoid or reduce impacts:

- The entire site is mapped as an ESA and will require a Native Vegetation Clearing Permit (NVCP) for the proposed development area;

- 1.40 ha of Banksia Woodland TEC in excellent to good condition will remain;

- 5.06 ha of Black Cockatoo foraging habitat in excellent to very good condition will remain. Wherever possible, significant trees to be retained as part the proposed development will be flagged by a qualified scientist prior to clearing taking place. At least 13 potential breeding trees will remain within the adjacent ‘Rural – Water Protection’ zone.Prior to clearing, Black Cockatoo habitat will be inspected and potential breeding trees (DBH >500 mm) within the development envelope will be conserved where possible. Clearing of vegetation will be staged towards the CCW in order to allow fauna time to relocate to the adjacent bushland to be retained;

- Where possible, the clearing will not take place during the typical breeding season for the Black Cockatoo (July to mid-December) to avoid disturbance of species during peak breeding season. If clearing is to occur during the typical breeding season of the Black Cockatoo, a pre-clearing inspection of trees to be cleared will be undertaken to ensure there are no breeding activities present in the trees. If breeding activities are identified in any trees proposed to be cleared, appropriate fauna management measures will be implemented by a qualified Zoologist;

- All contractors involved in clearing activities will be inducted on the potential impacts to fauna and advised to stop works in the vicinity of any injured or shocked animals that are encountered. They will be instructed to contact the relevant environmental staff in this event;

- At least 13 potential breeding trees located in the project area will remain. The six potential breeding trees located within the proposed development area will be inspected prior to clearing and retained if possible;

- Approximately 30.34 ha or 73 % of the site (and the ecological values associated with the CCW, Banksia Woodlands TEC and Black Cockatoo habitat) will remain within the adjacent 'Rural – Water Protection' zone;

- The proponent will ensure that work areas and vehicle compounds are located in areas that do not require unnecessary vegetation to be cleared or destroyed. The boundaries of areas to be disturbed within the proposed development area will be clearly defined to prevent any unintended clearing of potential habitat;

- Community education will be undertaken as part of the sale of the Lots to raise awareness of the surrounding environment and the importance of protecting and enhancing native vegetation that provides habitat for Black Cockatoos. This will be done through providing brochures to future residents;

- An ASS self-assessment form will be completed for the site once detailed engineering design has been undertaken. If the assessment determines that there is a possibility of ASS disturbance form the proposed works then an ASS investigation will be undertaken in accordance with the DER's *'Identification and Investigation of ASS'* guideline. The ASS investigation will determine whether ASS will require managing during soil disturbance; and

- Urban development of the land will require the establishment of the an improved drainage system and incorporating water management design principles and structures set out in the DoW's '*Better Urban Water Management'* (BUWM) guidelines. A District Water Management Strategy will be prepared as part of the MRS rezoning process. The strategy will provide a co-ordinating framework and guide the key requirements for water sensitive urban design, as well as demonstrate that the project area can support urban development best practice urban water management.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

Threatened Ecological Community (TEC): Banksia Woodlands of the Swan Coastal Plain is listed as Endangered and protected under the EPBC Act (s 266B). Of this TEC 8.53 ha occurs across the proposed development area. The proposed development would require clearing 8.53 ha of the Banksia Woodlands TEC while conserving 1.4 ha. TECs and their associated buffers are regarded as ESAs.

Black Cockatoo: There are 19 potential Black Cockatoo breeding trees with no observable breeding hollows recorded within the proposed development area, this suggests that the site is not utilised for breeding by the Black Cockatoo.Suitable foraging habitat of the Black Cockatoo

has an area of 14.13 ha within the project area and coincides with Banksia Woodlands TEC. The proposed development would require clearing of 9.07 ha of Black Cockatoo habitat within the proposed 'Urban' development area while 5.06 ha will remain within the balance of title.

Weeds: Two Declared introduced species *Asparagus asparagoides (listed under the BAM Act and WONS) and *Zantedeschia aethiopicaI (BAM Act) were observed within the site.

Conservation Category Wetland: One CCW and its associated buffer exists within the middle portion of the site which is zoned 'Rural – Water Protection'.

Jandakot Underground Water Pollution Control Area (UWPCA): The site is located within the UWPCA. The western portion of the site is zoned as 'Urban Deferred' is classified Priority 3, with remainder of the site being located within the periphery of the Priority 2 area. Priority 3 areas occur on land zoned 'Urban' to manage risks and Priority 2 areas occur where land is zoned 'Rural' to minimise risks. The development proposes to extend into Priority 2.

Provided the MRS rezoning process concludes that it is acceptable to rezone land to 'Urban', land proposed to be developed for residential housing can be reclassified from Priority 2 to Priority 3. Environmental initiatives (i.e. extension of deep sewer to all lots, application of water sensitive urban design principles, etc.) will be implemented to ensure any potential groundwater impacts arising from urban development are minimised.

Regional Ecological Linkages: The northern half of the site is within Perth Regional Ecological Linkage 52. As a result of the proposed clearing, the development will impact on the west-east ecological link through the site. However, an ecological corridor is proposed in southern portion of the 'Urban Deferred' zone to maintain the connection between the adjacent Bush Forever site, the CCW and surrounding Jandakot Regional Park.

Acid Sulfate Soils (ASS) risk: The central portion of the site has derived 'High to Moderate' risk of ASS occurring within 3 m of the natural soil surface. The eastern and western portions of the site have derived 'Moderate to Low' risk.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

The key reasons why the proposal is **not** likely to have significant impacts on a matter protected under the EPBC Act is outlined in the following sections.

Lead to a long term decrease in the size of a population

The site contains a 19 trees with a DBH >500 mm and includes 14.13 ha of potential foraging habitat for Black Cockatoos where a small quantity of foraging evidence was observed during the survey. None of the trees within the project area contained observable hollows.

The proposed development may result in the clearing of 6 potential breeding trees and 9.07 ha of Black Cockatoo foraging habitat. Although no Black Cockatoos were sighted or heard during the survey, Of the Black Cockatoo foraging habitat, 5.06 ha in Good – Excellent condition will remain. This includes a portion of vegetation within south west corner of the site which is zoned ‘Urban Deferred’ and will provide a vegetated connection between the Bush Forever site to the west and the remaining vegetation to the east. The clearing within the proposed development area will result in a continuous patchwork of remaining native vegetation which will allow foraging by Black Cockatoos to continue.

Mapping shows that 11 Bush Forever and Jandakot Regional Park sites within 5 km radius of the site have inferred floristic community types that are the same or similar to the Banksia Woodlands TEC and foraging habitat for the Black Cockatoo that is proposed to be cleared on the site.

Floristic community types of the surrounding Bush Forever and Jandakot National Park sites are presented below:

Bush Forever Site 492

Inferred

21a Central *Banksia attenuata – Eucalyptus marginata* woodlands

21c Low-lying *Banksia attenuata* woodlands or shrublands

23a Central *Banksia attenuata – B. menziesii woodlands*

Bush Forever Site 263

Inferred

21c Low-lying *Banksia attenuata* woodlands or shrublands

22 *Banksia ilicifolia* woodlands

23a Central *Banksia attenuata – B. menziesii woodlands*

Bush Forever Site 390

Inferred

23a Central *Banksia attenuata – B. menziesii woodlands*

Bush Forever Site 344

Inferred

21c Low-lying *Banksia attenuata* woodlands or shrublands

22 *Banksia ilicifolia* woodlands

Bush Forever Site 345

Inferred

21a Central *Banksia attenuata – Eucalyptus marginata* woodlands

21c Low-lying *Banksia attenuata* woodlands or shrublands

Bush Forever Site 262

Inferred

21a Central *Banksia attenuata – Eucalyptus marginata* woodlands

21c Low-lying *Banksia attenuata* woodlands or shrublands

Bush Forever Site 347

Inferred

22 *Banksia ilicifolia* woodlands

23a Central *Banksia attenuata – B. menziesii woodlands*

Bush Forever Site 268

Inferred

25 Southern *Eucalyptus gomphocephala*, *Agnonis flexuosa* woodlands

28 Spearwood *Banksia attenuata* or *B. attenuata - Eucalyptus woodlands*

Bush Forever Site 392

Inferred

21a Central *Banksia attenuata – Eucalyptus marginata* woodlands

23a Central *Banksia attenuata – B. menziesii woodlands*

Bush Forever Site 391

Inferred

24 Northern Spearwood shrublands and woodlands

28 Spearwood *Banksia attenuata* or *B.attenuata* woodlands

Bush Forever Site 389

Inferred

21c Low-lying *Banksia attenuata* woodlands or shrublands

22 *Banksia ilicifolia* woodlands

23a Central *Banksia attenuata – B. menziesii woodlands*

Consequently, the proposal to clear 11.06 ha of remnant vegetation, of which 9.07 ha is Black Cockatoo habitat and 8.53 ha is Banksia Woodlands TEC, will not result in a significant reduction of Banksia Woodlands TEC or potential Black Cockatoo habitat at a regional level.

Taking into consideration a large portion of the project area is proposed to remain and the presence of large intact habitat areas in surrounding Bush Forever sites and the Jandakot Regional Park, the proposal is considered unlikely to lead to a decrease in the size of Black Cockatoo or Banksia Woodlands TEC populations.

Population impacts on the Black Cockatoo is not expected to be considerable due to the absence of potential breeding trees containing observable hollows as well as the absence of sighted or heard Black Cockatoos during the survey. Breeding of Black Cockatoos is also generally restricted to Eucalypt woodlands in the Wheatbelt (DotEE 2017b). This suggests the habitat may not be primary use for breeding and may be utilised occasionally by the Black Cockatoo for foraging.

Reduce the area of occupancy of the species:

It is unlikely the proposal will reduce the occupancy for the Black Cockatoo and Banksia Woodlands TEC. It is highly likely that the adjacent Bush Forever, Jandakot Regional Park and DPaW managed lands would provide a larger area of occupancy for the Black Cockatoos.

There are a number of nearby large DPaW managed lands, Bush Forever sites and Jandakot Regional Park areas that can provide long-term protection for the Black Cockatoo and provide conservation and rehabilitation of the Banksia Woodlands TEC. The closest DPaW managed land exists approximately 463 m to the north-east of the site. A large cluster of DPaW managed land exists within 2 km to the east, west and south of the site.

These nearby DPaW managed lands, Bush Forever sites and Jandakot National Parks contain inferred floristic community types of the Banksia Woodlands TEC as displayed in Table 12 in the previous section.

Therefore, the nearby surrounding environments have large area of habitat utilised by the Black Cockatoo and contain the relevant floristic community types of the Banksia Woodlands TEC. These surrounding environments promote long term conservation and rehabilitation of these species.

Fragment an existing population into Two or more populations

The proposed clearing within the project will not result in the fragmentation of an existing population into two or more populations. This is as a result of the remaining CCW habitat and vegetation within the site (and outside the proposed development area), the presence of nearby protected bushland in DPaW managed lands and Bush Forever sites, and maintenance of the ecological corridor which provides a western linking to Bush Forever Site No. 492. The closest DPaW managed land existing approximately 462 m north-east of the site.

The extent of clearing is designed to ensure an ecological corridor is maintained between the Bush Forever Site No. 492 abutting the western boundary and the remaining CCW and vegetation within the ‘Rural – Water Protection’ zone.

The EPBC Act Referral Guidelines for the Black Cockatoos state that creating a gap of greater than 4 km between patches of Black Cockatoo habitat is at a high risk of causing significant impact (DSEWPaC 2012). Clearing of the site will not create a gap of more than 3 km between patches of Black Cockatoo Habitat and Banksia Woodlands TEC, as there are numerous areas of native vegetation within a 3 km radius of the project area.

Adversely affect the habitat critical to the survival of a species

The seasonal movements of Black Cockatoos mean they require large areas of habitat for breeding, roosting and foraging, as well as connectivity between habitats to assist their movement through the landscape (DSEWPaC 2012). Based on the EPBC Act Referral Guidelines for three threatened Black Cockatoo species, critical habitat for the Black Cockatoos is defined as providing breeding, roosting and foraging habitat which also provides connectivity between the habitats. Habitat that accommodates all three Black Cockatoo species would be defined as most critical.

It is not considered that the proposed clearing will adversely affect habitat critical to the survival of the Black Cockatoos as none of the 19 potential breeding trees contained observable hollows. 68.4% of potential breeding trees will be retained; however it is unlikely the site is used for breeding by the Black Cockatoos. The adjacent Bush Forever, DPaW managed lands and Jandakot Regional Park areas is likely to contain more suitable breeding and foraging habitat for the Black Cockatoo.

In addition, the remaining Banksia Woodlands TEC will preserve the habitat and maintain a connection between the abutting Bush Forever site, the CCW and the vegetation within the 'Rural – Water Protection zone (Figure 12).

Although the Banksia Woodlands TEC exists within the proposed development area, it is not expected to adversely affect the survival of the ecological community within the region. The area within a 5 km radius of the site identifies numerous conservation protected areas which contain the same or similar floristic community types as characterised by the Banksia Woodlands TEC. Several of these areas are managed by agencies such as DPaW and Local Governments to preserve and enhance the associated conservation values. Therefore, it is unlikely that the proposed clearing will adversely impact the survival of the Banksia Woodlands TEC.

Disrupt the breeding cycle of a population:

Traditionally, Carnaby's Black Cockatoo breed in the Wheatbelt region of Western Australia (Saunders 1980) and it is therefore less likely for Carnaby's Black Cockatoo to breed in large numbers within the site. Due to the absence of observable hollows in the 13 potential future breeding trees retained, it is unlikely that the proposed action will disrupt the breeding cycles of a Black Cockatoo population within the site.

Six potential breeding trees will be cleared and 13 potential breeding trees will remain. These 13 trees may develop hollows to be used by Black Cockatoos in the future.

Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline:

Within a 4 km radius of the project area, there are other patches of remnant vegetation within the adjacent Bush Forever sites and surrounding managed areas that may provide more suitable habitat that provide a connected habitat for the Black Cockatoos and conserved Banksia Woodlands TEC. Many of these sites are within DPaW managed lands.

Therefore, clearing of six potential breeding trees, that are currently not suitable for Black Cockatoo breeding, and 9.07 ha of potential foraging habitat is not considered to modify, destroy, remove, isolate or decrease the availability or quantity of habitat to the extent that the species is likely to decline. The surrounding environment within a 5 km radius of the site contains several Bush Forever sites, DPaW managed lands and Jandakot Regional Park areas contain suitable foraging and breeding habitats with larger areas than the proposed development area.

The ecological corridor in the south west corner of the site will not become a part of the residential development and will maintain the connection to Bush Forever Site No. 492, which abuts the western boundary of the lot. The ecological corridor will reduce the impacts of fragmented small patch sizes and maintain the movement of fauna populations through the Bush Forever site and the CCW and vegetation proposed to remain within the site.

Therefore, the proposed clearing is not likely to cause a decline of the species within the region.

Result in invasive species that are harmful to a Critically Endangered or Endangered species becoming established in the Endangered or Critically Endangered Species' habitat

The proposed action alone is unlikely to introduce or spread invasive species that are harmful to Black Cockatoos. The site currently contains a total of 27 introduced species, of which two species **Asparagus asparagoides* and **Zantedeschia aethiopica* are listed as Declared under the BAM Act. **Asparagus asparagoides* is also listed as a WONS.

The 50% reduction in Carnaby's Black Cockatoo abundance within the state is a result of clearing of core breeding habitat in the Wheatbelt, the deterioration of nesting hollows and clearing of food resources on the Swan Coastal Plain (Cale, 2003).

The clearing of the site may ameliorate weed species. If invasive species do result from the development of the site in the adjacent CCW or Bush Forever land, they are not seen to be key threats to Black Cockatoos.

Introduce disease that may cause the species to decline:

The proposed action to clear and develop Residential lots is unlikely to introduce disease that may cause the Black Cockatoo to decline. The only possible disease and parasite vector associated with developing the project area would be the attraction of cats and foxes which are known to favour 'edge' effects created from fragmented habitats. The proposed development is however unlikely to be an ideal habitat for foxes due to the presence of humans and traffic within the site and surrounding urban area.

Clearing of land and construction of roads and urban surfaces can result in the spread of dieback into surrounding Banksia Woodlands TEC patches. Subsequently, the surrounding areas will not be cleared and access will be restricted to authorised personnel only in order to retain the habitat structure and prevent the spread of dieback. Maintenance of the fauna habitat structure will control dieback Phytophthora cinnamomi occurrence. This will be done by

ensuring the surrounding vegetated areas will be maintained or improved by leaving and/or implementing fallen logs, leaf litter and controlling weed species which control dieback (EPBC 2016). Therefore, the proposed clearing of the site is unlikely to introduce disease that may cause the ecological community to decline.

Interfere with the recovery of the species:

The proposed action is unlikely to interfere with the recovery of the Black Cockatoo species as it is not deemed to contain any suitable hollows for breeding. The proposal will retain 13 potential future breeding trees that will be able to develop hollows to be utilised by Black Cockatoo breeding in the future. Given 30.34 ha of the site will remain, including the CCW as part of the ‘Rural – Water Protection’ zone, the proposal is unlikely to interfere with the recovery of the Black Cockatoo or the Banksia Woodlands TEC.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

All projects undertaken have received full statutory approvals to the satisfaction of the relevent environmental agencies.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Not applicable.

6.3 Will the action be taken in accordance with the corporation's environmental policy and planning framework?

No

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

EPBC Act Ref: 2016/7659 Urban Development Lots 3, 1199 and 650 Thomas Road, Casuarina, WA

EPBC Act Ref: 2015/7519 Residential development Lots 124 and 125 Wattleup Road, Hammond Park, Western Australia

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
360 Environmental, 2016, Level 2 Flora and Vegetation Survey, Beenyup Road, Banjup. Prepared for Aigle Royal Developments. West Leederville, Western Australia.	Environmental survey undertaken using current guideline specifications	N/A
360 Environmental, 2017, Black Cockatoo Habitat Assessment and Desktop Banksia Woodlands TEC Assessment, Beenyup Road, Banjup. Prepared for Aigle Royal Developments. West Leederville, Western Australia.	Environmental survey undertaken using current guideline specifications	N/A
Beard, J.S. 1972-80. Vegetation Survey of Western Australia: The Vegetation of the Perth Area, Western Australia. Perth: Vegmap Publications.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Cale, B. (2003). Carnaby's Black Cockatoo (Calyptorhynchus latirostris) Recovery Plan. Perth: Department of Conservation and Land Management.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Conservation Commission of Western Australia (CCWA), 2005, Forrestdale Lake Nature Reserve: Management Plan No. 53, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Aboriginal Affairs (DAA), 2017. Aboriginal Heritage Inquiry System. Accessed 27 February 2017	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A

Reference Source	Reliability	Uncertainties
from http://maps.dia.wa.gov.au/AHIS2/, Government of Western Australia.		
Department of Agriculture and Food WA (DAFWA), 2012, Soil Subsystems GIS Dataset, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Environment and Conservation (DEC), 2010, Regional and Local Ecological Linkages for the Geraldton Local Biodiversity Strategy, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of the Environment and Energy (DotEE), 2016, Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain ecological community (s 266B), Commonwealth of Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of the Environment and Energy (DotEE), 2017a, Protected Matters Search Tool, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of the Environment and Energy (DotEE), 2017b, SPRAT Profile – Calytorhynchus latirostris – Carnaby's Cockatoo, accessed 22 March 2017 from http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=59523, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Environment Regulation (DER), 2014a, Acid Sulfate Soils Risk GIS Dataset, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Environment Regulation (DER), 2014b, Assessment and Management of Contaminated Sites –	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A

Reference Source	Reliability	Uncertainties
Contaminated Sites Guidelines, Government of Western Australia.		
Department of Environment Regulation (DER), 2016, Contaminated Sites GIS Dataset, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Parks and Wildlife (DPaW), 2015, Geomorphic Wetlands, GIS Database, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Parks and Wildlife (DPaW), 2017, NatureMap Tool Search Report, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Sustainability, Environment, Water, Populations and Communities (DSEWPaC), 2012, EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Department of Water (DoW), 2016, Water Quality Protection Note No.25 - Land use compatibility tables for public drinking water source areas, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Environment Protection and Biodiversity Conservation Act (EPBC), 2016, Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain ecological community (s 266B), Commonwealth of Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Environment Protection Authority (EPA) 2008. Guidance Statement No. 33, Environmental Guidance for Planning and Development.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A

Reference Source	Reliability	Uncertainties
Government of Western Australia		
Heddle, E.M., Loneragan, O.W. and Havel, J.J., 1980. Vegetation of the Darling System, Department of Environment and Conservation (south of Moore River), Department of Environment and Conservation.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Johnstone, R. E., Kirkby, T., and Sarti, K., 2013. The breeding biology of the Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso Gould in south-western Australia. I. Characteristics of nest trees and nest hollows. Pacific Conservation Biology 19, 121-142	Peer reviewed paper All references are peer reviewed articles in reputable papers or are government publications.	N/A
Johnstone, R. E, & Kirkby, T. (2011). Carnaby's Black Cockatoo (Calyptorhynchus latirostris), Baudin's Black Cockatoo (Calyptorhynchus baudinii) and the Forest Redtailed Black Cockatoo (Calyptorhynchus banksii naso) on the Swan Coastal Plain(Lancelin–Dunsborough), Western Australia. Studies on distribution, status, breeding, food, movements and historical changes. Perth: Department of Planning.	Peer reviewed article/Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Johnston, R. E., & Storr, G.M (1998). Handbook of Western Australian Birds, Volume 1 – Non-Passerines (Emu to Dollarbird). Oxford University Press.	Peer reviewed paper All references are peer reviewed articles in reputable papers or are government publications.	N/A
Perth Biodiversity Project (PBP) 2008. Perth Regional Ecological Linkages, GIS Dataset, Western Australia	Peer reviewed paper All references are peer reviewed articles in reputable papers or are government publications.	N/A
Perth Biodiversity Project (PBP)	Government Publication All	N/A

Reference Source	Reliability	Uncertainties
2013. Central Perth regional parklands concept – Vegetation Connectivity Analysis, prepared for Department of Planning and Western Australian Planning Commission, Western Australia.	references are peer reviewed articles in reputable papers or are government publications.	
Western Australian Planning Commission (WAPC), 2015. Zones, Reservations and Bush Forever Areas. Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Western Australian Planning Commission (WAPC), 2017, State Planning Policy 2.3 – Jandakot Groundwater Protection, Government of Western Australia.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Ramsar (Iran), 1971, Convention on Wetlands of International Importance especially as Waterfowl Habitat. UN Treaty Series No. 14583.	Peer reviewed paper/ Intergovernmental Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Shah, B. (2006). Conservation of Carnaby's Black Cockatoo on the Swan Coastal Plain, Western Australia. Perth: Birds Australia.	Peer reviewed paper All references are peer reviewed articles in reputable papers or are government publications.	N/A
Shepherd, D. P., Beeston, G. R., and Hopkins, A. J. M. 2001. Native Vegetation in Western Australia (Technical Report 249). Perth: Department of Agriculture.	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
State Heritage Office (SHO), 2017, Heritage Places Search, accessed 1 March 2017 from http://inherit.stateheritage.wa.gov.au/public, Government of Western Australia	Government Publication All references are peer reviewed articles in reputable papers or are government publications.	N/A
Saunders, D.A., 1980. Food and movements of the short-billed form of the White-tailed Black Cockatoo. Australian Wildlife Research, 7: 257-69.	Peer reviewed paper All references are peer reviewed articles in reputable papers or are government publications.	N/A

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

N/A

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

CEO

9.2.2 First Name

Anthony

9.2.3 Last Name

Poli

9.2.4 E-mail

kkennedy@aigleroyal.com.au

9.2.5 Postal Address

Level 8

225 St Georges Tce
PERTH WA 6151
Australia

9.2.6 ABN/ACN

ABN

79161769826 - The Trustee for ARD No.7 Discretionary Trust

9.2.7 Organisation Telephone

(08) 9322 2248

9.2.8 Organisation E-mail

kkennedy@aigleroyal.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:…… Date: ……

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Anthony Poli_____, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:…… Date: 19th April 2017……

I, _____, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:…… Date: ……

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

CEO

9.5.2 First Name

Anthony

9.5.3 Last Name

Poli

9.5.4 E-mail

kkennedy@aigleroyal.com.au

9.5.5 Postal Address

Level 8

225 St Georges Terrace
PERTH WA 6000
Australia

9.5.6 ABN/ACN

ABN

12585998898 - The trustee for The Bellridge Trust

9.5.7 Organisation Telephone

(08) 9322 2248

9.5.8 Organisation E-mail

kkennedy@aigleroyal.com.au

Proposed designated proponent - Declaration

I, Anthony Poli, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:…… Date: 19th April 2017

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Principle Environmental Scientist

9.8.2 First Name

Katherine

9.8.3 Last Name

Choo

9.8.4 E-mail

kathychoo@360environmental.com.au

9.8.5 Postal Address

10 Bermondsey Street
WEST LEEDERVILLE WA 6007
Australia

9.8.6 ABN/ACN

ACN

109499041 - 360 Environmental Pty Ltd

9.8.7 Organisation Telephone

(08) 9381 2360

9.8.8 Organisation E-mail

admin@360environmental.com.au

Referring Party - Declaration

I, KATHERINE CHOO, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: ..... Date: 19/04/17

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. 1350_banjup_360environmental_data_gis_file.zip
2. attachment_1_epbc_figures.pdf
3. attachment_2a_1269ab_flora_and_vegetation_survey_banjup_final_report_2.2.16_part1.pdf
4. attachment_2b_1269ab_flora_and_vegetation_survey_banjup_final_report_2.2.16_part2.pdf
5. attachment_3_2123ab_black_cockatoo_and_banksia_assessment_final_4.4.17.pdf
6. attachment_4a_1350ae_epbc_act_referral_supporting_document_part1.pdf
7. attachment_4b_1350ae_epbc_act_referral_supporting_document_part2.pdf